

ATTORNEY DOCKET NO. 97-S-159C1 (STMI01-97159)
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PATENT

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows, substituting any amended claim(s) for the corresponding pending claim(s):

1. (Currently Amended) A digital audio/video decoder comprising:
 - a file reader capable of obtaining any of one or more encoded audio/video data streams from a data source ~~utilizing a file system~~;
 - a file navigator enabling selection of a particular file on the data source and instructing the file reader to obtain a selected encoded audio/video data stream from the data source;
 - a splitter separating the encoded audio/video data stream obtained by the file reader into one or more component data streams; and
 - a reprogrammable proxy filter adapted to programmably operate on video data coded according to any one of a plurality of video data coding standards and on audio data separately coded according to any one of a plurality of audio data coding standards, the proxy filter decoding and converting the one or more component data streams into three or more renderable signals including at least one renderable audio signal and at least two renderable video signals.

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2. (Previously Presented) The digital audio/video decoder as recited in claim 1, further comprising a user interface connected to the file navigator for selecting a file containing the encoded audio/video data stream to be obtained.
3. (Original) The digital audio/video decoder as recited in claim 2, wherein the user interface further comprises more than one predefined functions for selecting the encoded audio/video data stream to be obtained.
4. (Previously Presented) The digital audio/video decoder as recited in claim 3, wherein the more than one predefined functions comprise:
 - a play function;
 - a pause function;
 - a menu function;
 - a stop function;
 - a previous function; and
 - a next function.

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5. (Previously Presented) The digital audio/video decoder as recited in claim 2, wherein the one or more component data streams further comprises:

an audio data stream;

a video data stream;

a subpicture data stream; and

a navigation data stream.

6. (Previously Presented) The digital audio/video decoder as recited in claim 5, wherein the file navigator is coupled to the splitter such that the file navigator can use the navigation data stream to select the file containing the encoded audio/video data stream to be obtained according to one or more selection signals received from the user interface.

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7. (Previously Presented) The digital audio/video decoder as recited in claim 1, wherein the reprogrammable proxy filter further comprises:

an audio decoder;

a video decoder; and

a subpicture decoder,

wherein each of the audio decoder, the video decoder and the subpicture decoder may be selectively updated or replaced within the proxy filter.

8. (Previously Presented) The digital audio/video decoder as recited in claim 1, wherein the reprogrammable proxy filter can decode and convert component data streams that conform to one or more of an MPEG coding standard, a Dolby AC-3 coding standard, a PCM coding standard.

Claims 9-10 (Canceled)

11. (Original) The digital audio/video decoder as recited in claim 1, wherein the reprogrammable proxy filter uses one or more decoding standards to decode and convert the one or more component data streams.

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12. (Original) The digital audio/video decoder as recited in claim 11, wherein the one or more decoding standards can be updated via software.
13. (Original) The digital audio/video decoder as recited in claim 11, wherein a new decoding standard can be added to the one or more decoding standards via software.
14. (Previously Presented) The digital audio/video decoder as recited in claim 1, wherein the three or more renderable signals comprise:
- a renderable audio signal;
 - a renderable video signal; and
 - a renderable subpicture signal.
15. (Original) The digital audio/video decoder as recited in claim 14, further comprising a mixer for combining the renderable subpicture signal with the renderable video signal and producing a combined video signal.
16. (Original) The digital audio/video decoder as recited in claim 1, wherein the reprogrammable proxy filter further comprises a function for synchronizing the three or more renderable signals.

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17. (Original) The digital audio/video decoder as recited in claim 1, further comprising:
- an audio renderer coupled to the reprogrammable proxy filter and an audio application program interface, the audio renderer controlling the manipulation and rendering of an audio signal from the three or more renderable signals; and
 - a video renderer coupled to the reprogrammable proxy filter and a video application program interface, the video renderer controlling the manipulation and rendering of a video signal from the three or more renderable signals.
18. (Original) The digital audio/video decoder as recited in claim 17, further comprising:
- a sound card;
 - a video graphics adapter; and
 - a video driver for receiving the rendered video signal from the video application program interface and controlling the video graphics adapter such that a video output signal is produced from the rendered video signal.

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19. (Previously Presented) The digital audio/video decoder as recited in claim 17, wherein the data source is a digital video disk (DVD), the digital audio/video decoder further comprising:
- a DVD device driver; and
 - a DVD drive,
- wherein the file reader accesses the DVD through the DVD device driver and DVD drive.
20. (Currently Amended) A digital audio/video decoder comprising:
- a file reader capable of obtaining any of one or more encoded audio/video data streams from a data source ~~utilizing a file system~~;
 - a navigator enabling selection of a particular file on the data source and instructing the file reader to obtain a selected encoded audio/video data stream from the data source;
 - a user interface connected to the navigator and having one or more predefined functions for selecting an encoded audio/video data stream to be obtained;
 - a splitter separating the encoded audio/video data stream obtained by the file reader into an audio data stream, a video data stream, a subpicture data stream and a navigation data stream, wherein the navigator is coupled to the splitter such that the navigator can use the navigation data stream to select the encoded audio/video data stream to be obtained;

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an audio filter adapted to programmably operate on audio data coded according to any one of a plurality of audio data coding standards, the audio filter decoding and converting the audio data stream into a renderable audio signal;

a video filter adapted to programmably operate on video data coded according to any one of a plurality of video data coding standards separately of an audio data coding standard currently employed by the audio filter, the video filter decoding and converting the video data stream into a renderable video signal;

a subpicture filter decoding and converting the subpicture data stream into a renderable subpicture signal;

a mixer combining the renderable subpicture signal with the renderable video signal and producing a combined video signal;

a synchronizing filter synchronizing the renderable audio signal and the combined video signal;

an audio renderer coupled to the audio decoder and an audio application program interface, the audio renderer controlling the manipulation and rendering of an audio signal from the renderable audio signal; and

a video renderer coupled to the mixer and a video application program interface, the video renderer controlling the manipulation and rendering of a video signal from the combined video signal.

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Claims 21-24 (Canceled)

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25. (Currently Amended) A digital audio/video system comprising:
- a DVD drive;
 - a file reader communicably coupled to the DVD drive to obtain any of one or more encoded audio/video data streams from the DVD drive utilizing a file system;
 - a navigator communicably coupled to the file reader enabling selection of a particular file on the data source and selectively instructing the file reader to obtain a particular encoded audio/video data stream corresponding to a selected file from the DVD drive;
 - a splitter communicably coupled to the file reader and separating the encoded audio/video data stream into one or more data streams;
 - a reprogrammable proxy filter communicably coupled to the splitter and adapted to programmably operate on video data coded according to any one of a plurality of video data coding standards and separately on audio data coded according to any one of a plurality of audio data coding standards, the proxy filter decoding and converting the one or more component data streams into three or more renderable signals including at least one renderable audio signal and at least two renderable video signals;
 - a mixer communicably coupled to the reprogrammable proxy filter and combining the at least two renderable video signals and producing a combined video signal;

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an audio renderer coupled to the reprogrammable proxy filter and an audio application program interface, the audio renderer controlling the manipulation and rendering of the at least one renderable audio signal; and

a video renderer coupled to the mixer and a video application program interface, the video renderer controlling the manipulation and rendering of the combined video signal.

26. (Previously Presented) The digital audio/video system as recited in claim 25, further comprising a user interface connected to the file navigator and selecting the encoded audio/video data stream to be obtained.

27. (Previously Presented) The digital audio/video system as recited in claim 26, wherein the user interface further comprises more than one predefined function for selecting the encoded audio/video data stream to be obtained.

Claims 28–30 (Canceled)

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31. (Previously Presented) The digital audio/video system as recited in claim 25, wherein the reprogrammable proxy filter uses one or more decoding standards to decode and convert the one or more component data streams and contains software that may be selectively updated or replaced.
32. (Original) The digital audio/video system as recited in claim 25, wherein the reprogrammable proxy filter further comprises a function for synchronizing the three or more renderable signals.
33. (Previously Presented) The digital audio/video system as recited in claim 25, further comprising:
- a sound card;
 - an audio driver receiving the rendered audio signal from the audio application program interface and controlling the sound card such that an audio output signal is produced from the rendered audio signal;
 - a video graphics adapter; and
 - a video driver receiving the rendered video signal from the video application program interface and controlling the video graphics adapter such that a video output signal is produced from the rendered video signal.